

MARITIME HERITAGE MINNESOTA

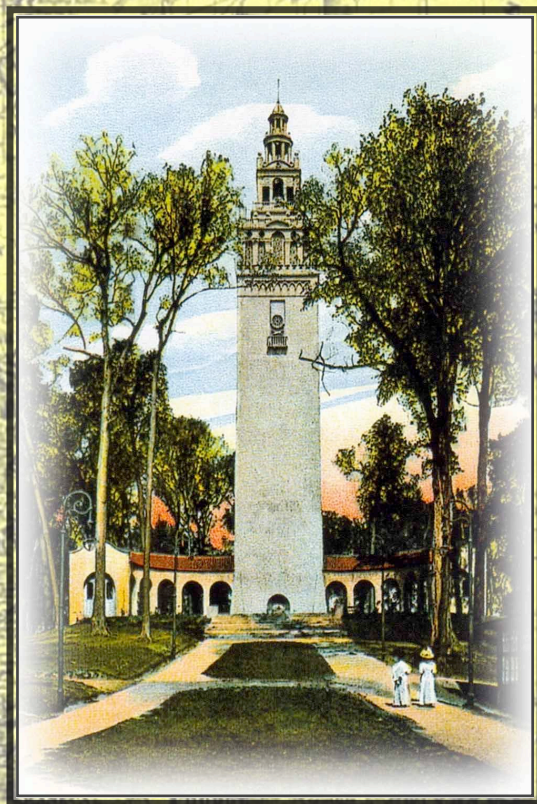
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NAUTICAL ARCHAEOLOGISTS
MARITIME HISTORIANS

2007 Big Island Summer Institute

Dig On This Archaeology Program Report



MHM IS A 501.(c).3 NON-PROFIT CORPORATION DEDICATED TO
THE DOCUMENTATION, CONSERVATION, AND PRESERVATION OF
MINNESOTA'S FINITE MARITIME CULTURAL RESOURCES

Acknowledgments

The preliminary archaeological investigation of Big Island, Lake Minnetonka was made possible by the City Council of Orono, Orono Community Education, Marleane Callaghan, and the kindness of Jake Westman (thanks for the boat rides!). Maritime Heritage Minnesota (MHM) thanks the above groups and individuals, as well as the always welcome Jim Ogland, MHM volunteer Kelly Nehowig for his great photography and generous offering of his time for the project, and MHM Board Members Deb Handschin and Mike Kramer. MHM also thanks and acknowledges the kids and adult counselors who helped us “Dig On This.” Their names and excavator numbers will always be connected to any fieldwork on Big Island, and we hope they had fun:

Excavator Number

Name

1	Christopher Olson
2	Ann Merriman
3	Anne Kramer (2003)
4	Liz Kramer (2003)
5	Kelly Nehowig
6	Jake Westman
7	Kiira Siitern
8	Marleane Callaghan
9	Christian (Buddy) Belz
10	Erik Belz
11	Isabel Brandt
12	Dylan Breon
13	Ellen Conger
14	Emilyjohn Connors
15	Kalvin Danielson
16	Missy De Pietro
17	Zach De Pietro
18	Megan Donaldson
19	Ivan Grafft
20	Allison Mullin
21	Sienna Penner
22	Willie Rohweder
23	Eva Shuman
24	Alana Sundby
25	Ian Sundby
26	Tommy Swenson
27	Jake Zell
27	Ozzie Secundino
29	Jim Ogland

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All in-the-field photographs by MHM staff unless otherwise noted as being taken by MHM volunteer Kelly Nehowig.

MHM staff members Ann Merriman and Christopher Olson and MHM volunteers received no monetary compensation for terrestrial and underwater work on Big Island. Production costs and web site hosting for this report courtesy of the MHM staff.

Big Island Archaeology Project 2007

Introduction

This report chronicles the activities of the participants in Orono Community Education's 2007 Big Island Summer Institute archaeology program "Dig on This," in conjunction with Maritime Heritage Minnesota (MHM). In preparation for two days of instruction on the theories and methods of archaeology and how their applications relate to Big Island, MHM staff members Ann Merriman and Christopher Olson, Maritime Historians and Nautical Archaeologists, spent one and two days respectively re-locating several archaeological features and sites of the Big Island Amusement Park (BIAP) and the Big Island Veteran's Camp (BIVC) previously identified in a brief survey conducted in 2003 prior to the beginning of the "Dig on This" program. This pre-Institute reconnaissance was necessary to determine the changes that have occurred near and to the substantial archaeological and historical resources of the island, and to determine a strategy for investigation during "Dig On This."

Pre-Big Island Summer Institute Investigations

2003

August 2003. On 3, 4 and 11 August 2003, MHM staff members Olson (1) and Merriman (2), and volunteers Anne Kramer (3) and Liz Kramer (4) conducted a small preliminary archaeological investigation of the area near the Roller Coaster (Fig. 1) that was part of the BIAP. The BIAP, and closed in 1911. A 1912 Sanborn Insurance Map of the closed ark shows several of its remaining structures. It is evident that the area, designated as "A" by MHM, is the location of the Roller Coaster and the remains of the Mission-style architecture that surrounded it. Also found during a terrestrial survey were the waterway trenches of the Old Mill Ride located next to the Roller Coaster, and the foundations of a toilet facility were located as well. The two test trenches opened during this brief examination exposed a retaining wall that encloses the Roller Coaster, revealing its reinforced concrete hollow tile construction. Small artifacts were also excavated, including various types of ceramics that date to the BIVC and were probably associated with the near-by Cook's Cabin.

2007

19 June 2007. Olson (1) returned to Big Island for pre-Institute reconnaissance, once again locating the Roller Coaster and Old Mill Ride. Olson (1) also located the foundations for the Women's Dormitory, a picnic kitchen, the remains of unknown origin tumbled near the Pond, and foundations for the Dance Pavilion. He (1) also noted the absence of the original concrete stairs from the BIAP Water Tower that had survived and were also the entrance stairs to the BIVC Mess Hall (razed in 2006). Olson (1) also ascertained the probable locations of some Mission-style arch bases near the present day boat landing and marked their possible locations with flags. In their original form, these archways had encompassed much of the park. Olson (1) also photographed two BIVC buildings for historic preservation purposes, and located the foundation of a destroyed cook's cabin.

21 June 2007. Merriman (2) joined Olson to more thoroughly trace the Old Mill ruins, investigate the archaeological site and artifacts of the BIVC Mess Hall, locate other possible archaeological sites, and perform a brief underwater reconnaissance near the island's boat landing. To the southwest of the BIVC cabins located near the island's northern shoreline, a large piece of metal mowing equipment, evidence of melted rubber, tar paper, and building materials, and the remains of a wooden building were located. A small midden containing complete white Homer Laughlin plates and other artifacts was also discovered. Sewer intakes with streetcar rails spanning them and dating to the BIAP, were located in the midden area and also near the Women's Dormitory. A similar sewer cover was located behind the modern bathroom facilities to the southwest of the Mess Hall site. The purpose of the underwater investigation was to locate the remains of the BIAP pier, a large earth-filled "W" shaped structure with dozens of support pilings. Within minutes of entering the water, one piling was located and marked with a flag.

Dig On This: Day 1**25 June 2007**

Introduction to Archaeology. After an introduction to the kids of "Dig On This" by Marleane Callaghan (8), Merriman (2) and Olson (1) gave a short lecture (with

hand-outs) on the definitions, methods, and theories of Archaeology, Terrestrial Archaeology, Maritime Archaeology, and Nautical Archaeology, and how these apply to the Institute's and MHM's goals. The kids were urged to define these disciplines for themselves and they did quite well. The group also briefly discussed what an artifact is, and the MHM staff dispelled the common misconception that archaeologists dig up dinosaurs; that is the work of *paleontologists*.

Definitions

Archaeology: The social science discipline concerned with reconstructing and understanding human behavior on the basis of the material remains left by our forebears.

Phase I: Site Identification Survey

Phase 2: Pre-disturbance documentation and small scale excavation

Phase 3: Excavation, documentation, and artifact collection and cataloging

Terrestrial Archaeology: The study of the past through remains discovered on land.

Underwater Archaeology: The study of the past through any submerged remains

Maritime Archaeology: The study of human interaction with the sea, lakes, and rivers through the archaeological study of material manifestations of maritime culture, including vessels, shoreside facilities, cargoes, and even human remains. Maritime Archaeology is in part a specialty within Underwater Archaeology, although the material remains of maritime activity are not always submerged. Maritime archaeological work has included the study of beached shipwreck sites, ship burials, waterfront communities such as fishing villages and industrial neighborhoods including shipyard archaeology and island habitation, floating vessels, and of course, sunken wrecks.

Nautical Archaeology: The study of the specifics of vessel construction and use. Nautical Archaeology is a specialty within Maritime Archaeology.

Sources: *Encyclopedia of Underwater and Maritime Archaeology*. New Haven: Yale University Press; *The Oxford Companion to Archaeology*. New York: Oxford University Press.

Phase 1 Pre-Disturbance Survey. Then, with copies of the 1912 Sanborn map of Big Island in hand, Olson (1) led the group, including MHM volunteer Kelly Nehowig (5), on a Phase 1 archaeological survey of the BIAP and BIVC ruins. The primary goal of this Phase 1 investigation was to teach the kids how to locate, but not disturb, artifacts, recognize large concrete and earthen features (building foundations, unidentified concrete remains, the Old Mill Ride contours), discover hidden architecture among the foliage, and critically think about what locations around the island would produce artifacts and features that could help us interpret the activities of its previous inhabitants.

Firstly, Olson (1) directed the kids' attention to various bits of concrete littered along the walking path leading from the modern picnic pavilion and the current boat landing, surmising what BIAP ruins may lie beneath. As expected, the group's attention was drawn to several red flags placed by Olson (1) the previous week. The flags marked the probable locations of Mission-style arch bases that litter the island and lie close to the surface. Then Olson (1) had the kids line up in an east-west orientation at the bottom of the hill below the site of the former BIVC Mess Hall. This operation was set up so the kids could walk transects up the hill, making observations of artifacts and features as they progressed. As expected, the group became very excited at the quantities and varieties of artifacts strewn upon the hill on the location of the demolished building. Occasionally a child picked up an artifact, and once again we (1 and 2) stressed the importance of leaving artifacts *in situ* until they are thoroughly documented, drawn, photographed, and properly tagged. After a brief reconnaissance of the Mess Hall site, Olson (1) directed the group eastward toward BIVC buildings, as well as the site of the recently demolished Cook's Cabin, also strewn with artifacts.

Just south of the BIVC buildings, Olson (1) led the group into the woods. Immediately the kids recognized the Mission-style hollow brick and concrete construction of the BIAP walls and referring to their maps, determined that we located the site of the Roller Coaster. They quickly investigated the Roller Coaster retaining wall and a nearby plinth, and Olson (1) pointed out a large reinforced concrete base for a Roller Coaster support. The group then moved to the location of the Old Mill Ride, just west of the Roller Coaster evidence. The kids admirably identified the large in-ground feature that comprises the Old Mill Ride remains. We (1 and 2) posed questions to them, encouraging them to think of other rides they may know of that resemble this one: the 1913 "Ye Olde Mill" at the Minnesota State Fair grounds and flume rides among them. Further, we made the kids aware of the surrounding tree growth, drawing their attention to the placement of older trees, of a different species than the majority of others, around them. The kids correctly surmised that these trees were probably planted in 1905 during the construction of the BIAP, or that the Park was constructed around them. Further, their specific

placement could be used as an indicator where the inside walls of the Old Mill Ride contours could be traced, since the trees lie within the confines of the ride itself. The brief survey concluded with an investigation of some BIVC ruins northeast of the Roller Coaster site.

Phase 2 Test Trenches. After lunch, MHM (1, 2, and 5) designed a Phase 2 archaeological test of the area where we were assured of finding substantial features that would not be damaged by partial excavation and examination. A Phase 2 investigation usually entails archaeologists conducting shovel tests along pre-determined transects on a suspected archaeological site following a Phase 1 pre-disturbance survey. In the case of Big Island, there are several known archaeological sites but most would require a delicate hand, complicated techniques, and a variety of archaeological tools to properly clear, document, and excavate. With this in mind, the area near the current boat landing where Olson (1) and Merriman (2) had previously located several arch bases through remote probing would be the subject of Phase 2 test trenches to be excavated by the kids.

The kids split into the groups assigned to them by Callaghan (8) and the adults (1, 2, 5, 6 [Jake Westman], 7 [Kiira Siitarn], 8) oversaw their test digging, moving from group to group. Using trowels and brushes, the kids began to uncover the Mission-style arch bases that were comprised of a concrete platform topped and surrounded by hollow double terra cotta bricks reinforced with concrete. Four arch bases were partially uncovered to the west (ABW 1 to ABW 4) and three to the east (ABW 1 to ABW 3) of the still extant small gazebo bases bordering the existing BIAP entrance steps. The kids were encouraged to make notes in their survey notebooks, and to draw and measure the emerging archaeological features. By the end of the day, the bases were not completely uncovered, and it was decided to continue with these Phase 2 test trenches the next day, time permitting. Lastly, we (1 and 2) asked the kids to deduce where the “best” location to set up trenches in order to discover artifacts that could help us understand the activities of the people present on the island in the past. One junior surveyor suggested the Old Mill Ride, which does seem like an obvious choice. However, we posed questions to him about the logistics of such a dig, not the least of which would be the probable clearance of

some small trees around the area. The kids agreed that, at this moment, a better place to dig would be the site of the former BIVC Mess Hall, where thousands of artifacts litter the ground.

Dig On This: Day 2

26 June 2007

Phase 3: Excavation. We (1 and 2) arrived at the island early to set up a Phase 3 investigation of the former Mess Hall site. A Phase 3 archaeological excavation entails the actual “digging” up of artifacts and features, with the intention of removing artifacts for study and analysis after their documentation *in situ*. The area was labeled “B”, since “A” was given to the test trenches examined in 2003. MHM staff set up ten 36 by 36 inch test trenches in a North-South orientation with iron spikes and string, leveling off the north side of the trench string to be used for triangulation.

When the kids arrived, we (1 and 2) gave a short lecture on the basic excavation techniques of trowel use and triangulation, and described the Excavation Unit (EU) system of documentation being used for this site. The kids separated into their pre-assigned groups and chose a test trench to record and excavate; we designated them “B1-B8,” and two remained untouched. Provided with an EU sheet to record the surface finds of their trench, the kids drew and measured the placement of visible artifacts while *in situ*. Once collected, the kids gave the different types of artifacts (wood, ceramics, glass) distinct numbers that reflected their trench and EU, and repeated the process as they dug deeper with new EU sheets provided every five inches. The artifacts were placed into separate bags by type and labeled. After about two hours of work, we (1 and 2) decided to halt the excavation because of extreme heat and lack of shade. The artifacts, EU sheets, and equipment were collected.

Historical Interlude. After lunch, the kids were lucky to have a visit from Jim Ogland (29), author of *Picturing Lake Minnetonka: A Postcard History*, and friend of MHM. Jim is known for his great talks on the history of Lake Minnetonka, and Big Island in particular. He brought with him many visual aides including enlarged postcards and photographs of BIAP and a vintage postcard camera. Jim related

stories of the island's history, provided the kids with some pages out of his historical "insights" concerning BIAP and even had a raffle for prizes. Jim's presentation was well received and his appearance at "Dig On This" was valuable and appreciated.

Phase 2 Test Trenches Continued. The kids were excited to resume their Phase 2 test trenches, so they separated into their groups again and were provided with trowels and brushes to continue their cleaning of the arch bases. In addition to the seven bases already partially uncovered, another was located to the west (ABW 5) and two more to the east (ABE 4 and ABE 5), making a total of ten. It was discussed with the kids how we could determine where more bases were and they caught on quickly by deciding it would be good to measure the distance between them, and extrapolate from there where the next bases would be placed. Also, one base (ABE 3) has a much bigger bottom platform than the others, and the kids hypothesized about why that might be. A good idea put forth was that this arch may have had a set of stairs nearby and it was part of that, or that the arch that formerly occupied the site had to support some extra weight. Of particular interest during the uncovering of ABE 1 was the collection of two bullet shell casings that were documented *in situ* and treated as small finds. The boys excavating this trench hypothesized several scenarios as to why these casings were present, from the intrepid hunter hiding in the foliage to a possible murder scene. Since they also found a small animal bone, they felt the hunting scenario was more likely.

Post-Big Island Summer Institute Investigations

27 June, 2007

Olson (1) and Merriman (2) returned to Big Island to dismantle the Phase 3 excavation trenches in Area B, to clean, measure, photograph, and re-bury the Phase 2 exposed arch bases, and to continue the underwater survey of Big Island Bay.

Area B. After clearing the Phase 3 evidence, MHM further investigated the former Water Tower site to discover the probable location of the tower's base. While any tower base evidence may be buried or destroyed, MHM did locate arch bases for the semi-circular walkway that extended out from the tower on its west and east sides. To complete this season's brief investigation of Area B, Merriman (2) walked

north-south transects collecting diagnostic ceramic sherds to create a representative sample of Mess Hall dinnerware, and examples of wood, glass, and metal (butter knife, door hinges, etc.) artifacts as representative surface finds in the Mess Hall area. The disturbed nature of Area B prevented any stratigraphic documentation.

Arch Bases (ABW 1 to ABW 5, ABE 1 to ABE 5). MHM staff carefully cleaned and created measured drawings of the ten exposed arch bases near the shoreline. The various levels of preservation of the ten arch bases uniquely demonstrates their concrete reinforced hollow tile construction built-up around a concrete core, stabilized by a square concrete platform. After their complete documentation, MHM staff placed plastic orange emergency tape over each arch base, marked with “MHM OLSON MERRIMAN 6-27-2007” and re-buried. The tape delineates the archaeological feature still *in situ*, the disturbed soil above it, and the undisturbed soil below it.

Big Island Bay. After the re-burying of the arch bases, MHM staff went into the water to survey the area around the previously flagged pier piling. Another piling was found 9.5 feet to the south of the first, with additional pilings discovered to the east of the first, running parallel to the shoreline.

9 July 2007

MHM staff returned to Big Island to photograph the remaining BIVC buildings, briefly re-investigate “The Pond,” survey the Roller Coaster and Old Mill Ride sites again, and further investigate the underwater site in Big Island Bay.

Building Foundations. It has been determined that the BIVC bathroom, approximately 470 feet to the southeast of the former Mess Hall location, was constructed on a BIAP bathroom foundation. The foundation is currently a raised concrete slab with evidence of partitions, toilet drains, and shower stalls. A wooden fish cleaning shack that still stands east of the Mess Hall location, approximately 150 feet northeast of the bathroom foundation also rests on top of a large concrete slab that once supported a BIAP Picnic Kitchen. Disruption of this foundation by tree roots is extensive, and the area is strewn with the remains of reinforced hollow tile.

Buildings. MHM staff examined four BIVC cabins that still stand to the northeast of the Mess Hall archaeological site near the northern shoreline of the

island. These buildings are in disrepair, but still contain strong evidence of their former appearance and were determined to be structurally sound after a brief examination. Two BIVC garage buildings, southeast of the Mess Hall site and located next to the remains of a razed BIVC cabin and lying to the north of the BIAP Roller Coaster site, contained interesting construction components. These buildings are built from simple concrete blocks and in one garage we found ceiling insulation that consisted of old bundled newspapers. The most accessible dated to 16 January 1949 and reported on President Truman's inauguration.

The Pond. Closer examination of the toppled pieces near the Pond indicates these structures are substantial concrete plinths. This area is a conundrum. The profuse amounts of hollow tile and concrete found in this area may indicate a dump site for torn-down buildings, but the sizeable plinths and the position of one in situ suggests they, at least, are original to this site. Further, a very large and recently (within the last two years) uprooted tree had grown *under* a large piece of concrete, up-ending it and breaking it into pieces when it fell.

Area A. MHM staff re-traced the retaining wall that enclosed the Roller Coaster ride and located two pontoon floats and kitchen equipment dumped in the area from a cruise boat, probably dating to the 1980s. Moving west, MHM staff traced the Old Mill Ride archaeological feature, wrapping orange tape around small trees to trace its perimeter in the woods. The ride is larger and has more turns in it than are indicated on the Sanborn map. We (1 and 2) marked the entire ride's contour with the exception of a small portion of its south edge. This section may not exist or is only partially extant.

Big Island Landing. In anticipation of placing a known datum point on the island in order to conduct a proper survey with a transit, MHM staff placed an inconspicuous metal spike into the ground south of the center plinth at a midway point between the two large gazebo base plinths at Big Island's landing.

Big Island Bay. MHM staff continued the underwater survey in order to locate more pier pilings. A distinct pattern of pilings and lateral planking were traced through the water, suggesting the "W" shaped pier remains may be somewhat intact below the waterline.

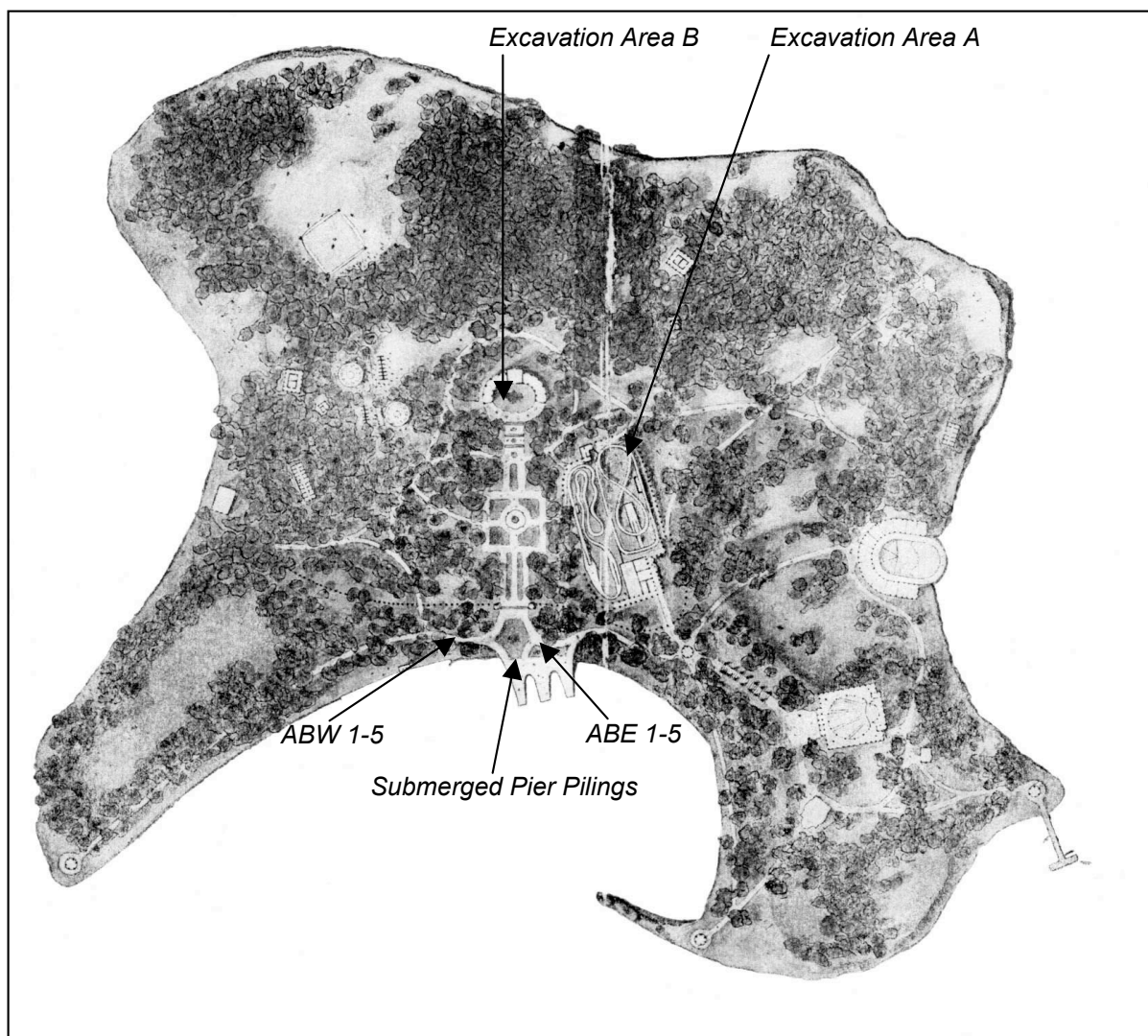


Fig. 1: This plan of Big Island Amusement Park, produced by the Twin City Rapid Transit Company for promotional purposes, seems to not be entirely accurate in that the Amphitheater on the island's eastern shoreline may not have been constructed. However, it clearly depicts the steamboat dock, walkway to the Water Tower, Old Mill Ride, Roller Coaster, Pergola, Casino, other buildings, and associated features.

Fig. 2: After some shovel testing, which is a technique designed to determine the depth of an archaeological site, a test trench was staked out on either side of a wall in Area A. This was done so that the wall could be used as a physical barrier between areas that likely contained artifacts from different time periods (due to the fact that one area is lower than the other) while the excavation would expose the wall's construction characteristics



Fig. 3: The west portion of the trench measures three feet square excluding the wall. The upper few inches of soil contained broken brick, concrete, stucco, and glass. The next six inches of soil contained almost no artifacts. This indicates that these levels are probably "fill" - dirt dumped in the area deliberately after Big Island Park closed. Artifacts dating to the early 20th century will likely be discovered in another foot or two.

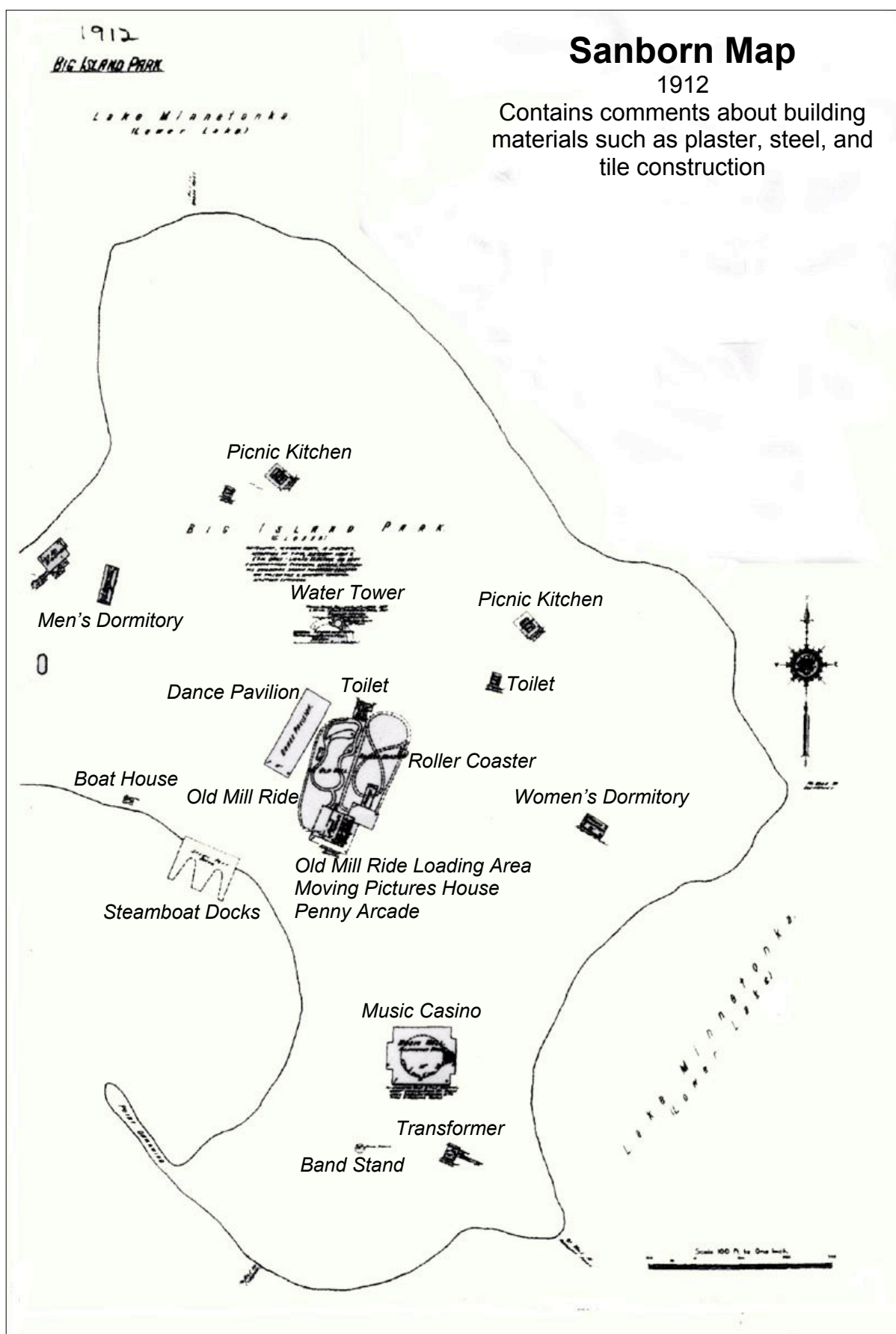


Fig. 4: The east portion of the trench also measures three feet square, but it includes the wall. The internal structure of the wall is evident and shows how the wall was constructed. The bricklayer stacked hollow tile bricks on top of each other and put concrete and broken bricks in the hollows to reinforce it. Then stucco was smoothed over the holes to hide the concrete and broken bricks. Note that the concrete does not reach the innermost parts of the hollow brick, indicating that the builder was standing on the west side of the wall during construction and didn't put more concrete through the holes on the east side.



Fig. 5: Inscriptions found on concrete near the excavation area. The year 1911 is clearly seen on this piece that is associated with a restroom.





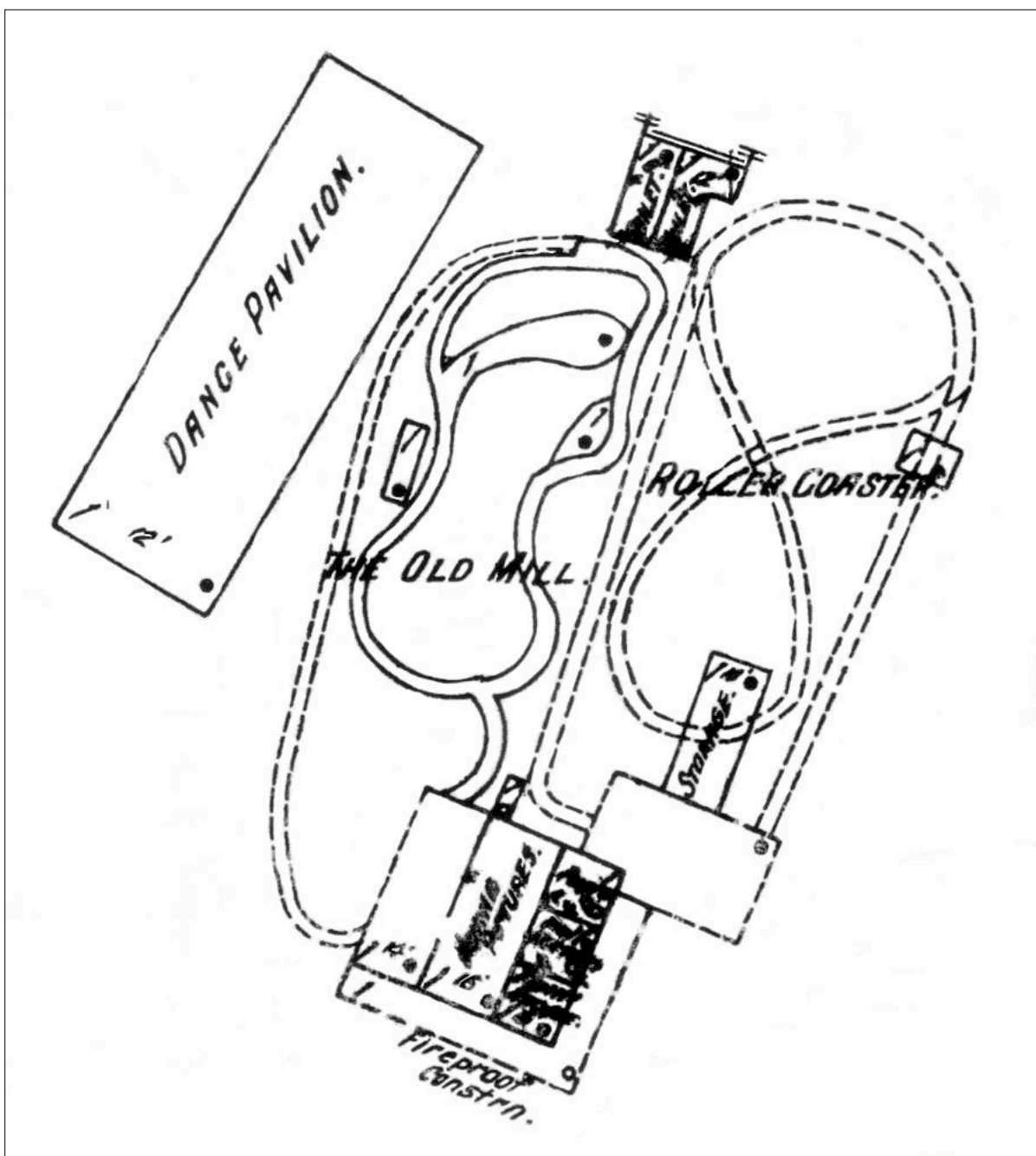


Fig. 6: Although the park was closed in 1911, the TCRT still had the real estate appraised for insurance purposes by the Sanborn Company. This portion of the 1912 Sanborn Map of Big Island clearly shows the Roller Coaster and Old Mill Ride. A wall with a brick base and stucco arches was located to the east of the Roller Coaster. A machinery base for the Roller Coaster, with a cutout for a flywheel, lies about 20 feet from the wall. This map marks also marks restrooms, a moving pictures house, a penny arcade, Dance Pavilion, and storage.

MHM Staff

Photo by Kelly Nehowig



Terrestrial Survey

Photo by Kelly Nehowig



Survey: Mess Hall/Tower Site

Photo by Kelly Nehowig



Survey: Mess Hall/Tower Site

Photo by Kelly Nehowig





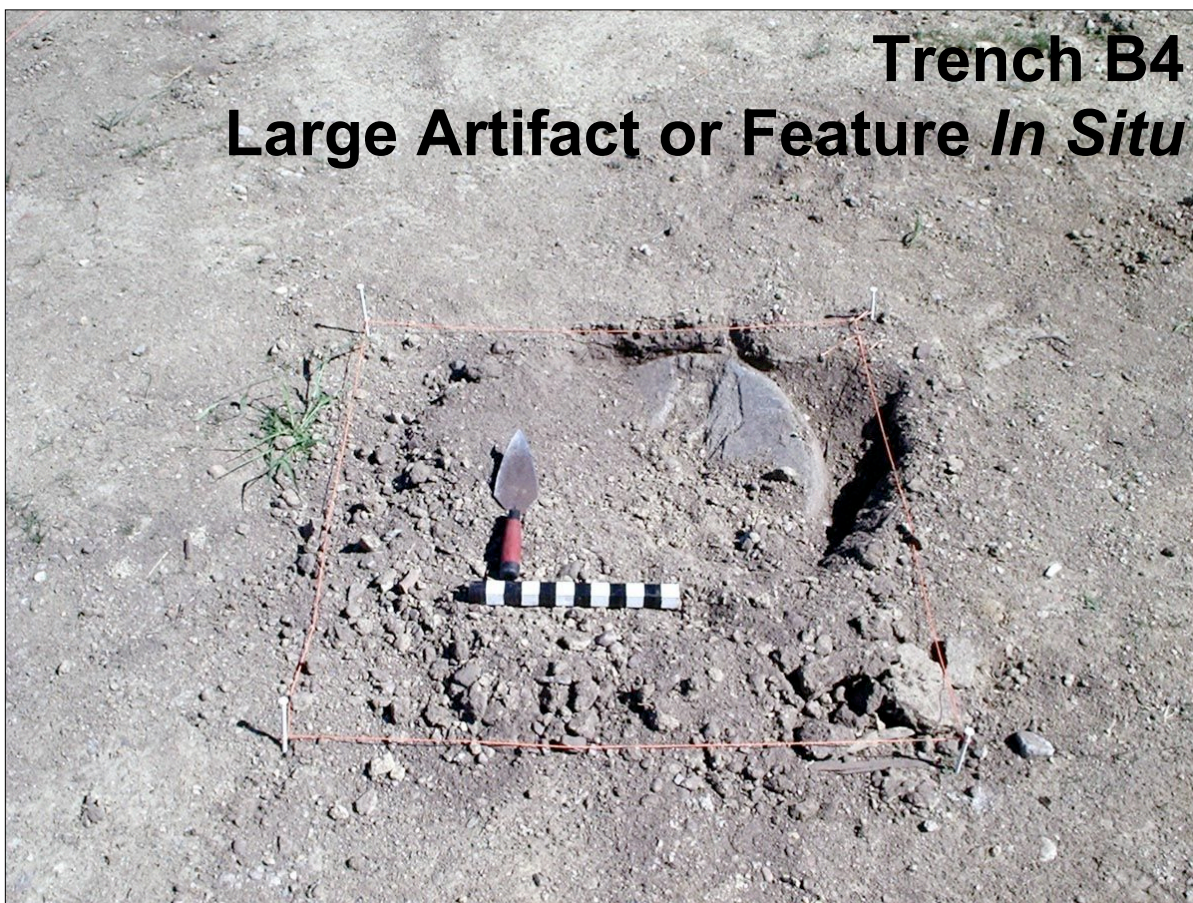


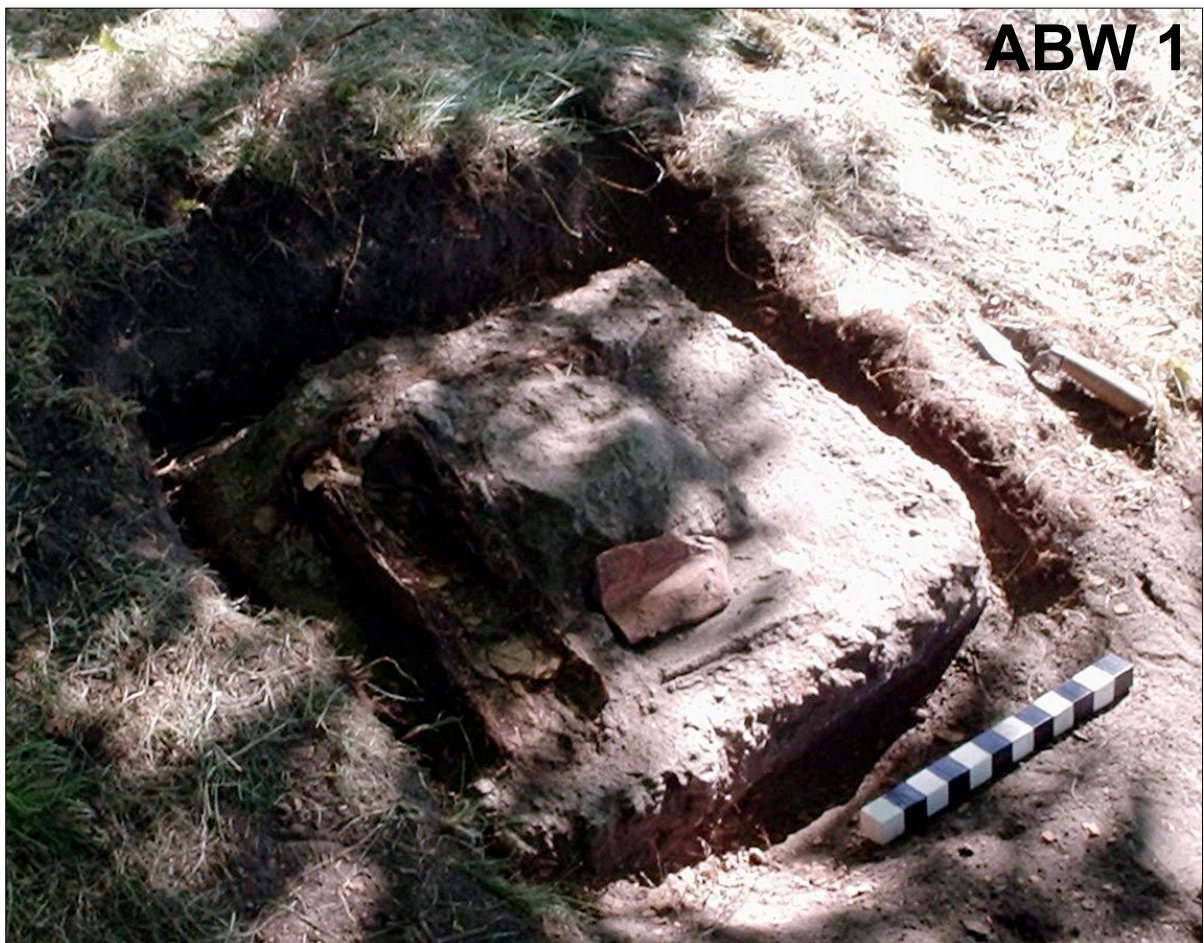


Area B Excavation



Trench B4 Large Artifact or Feature *In Situ*











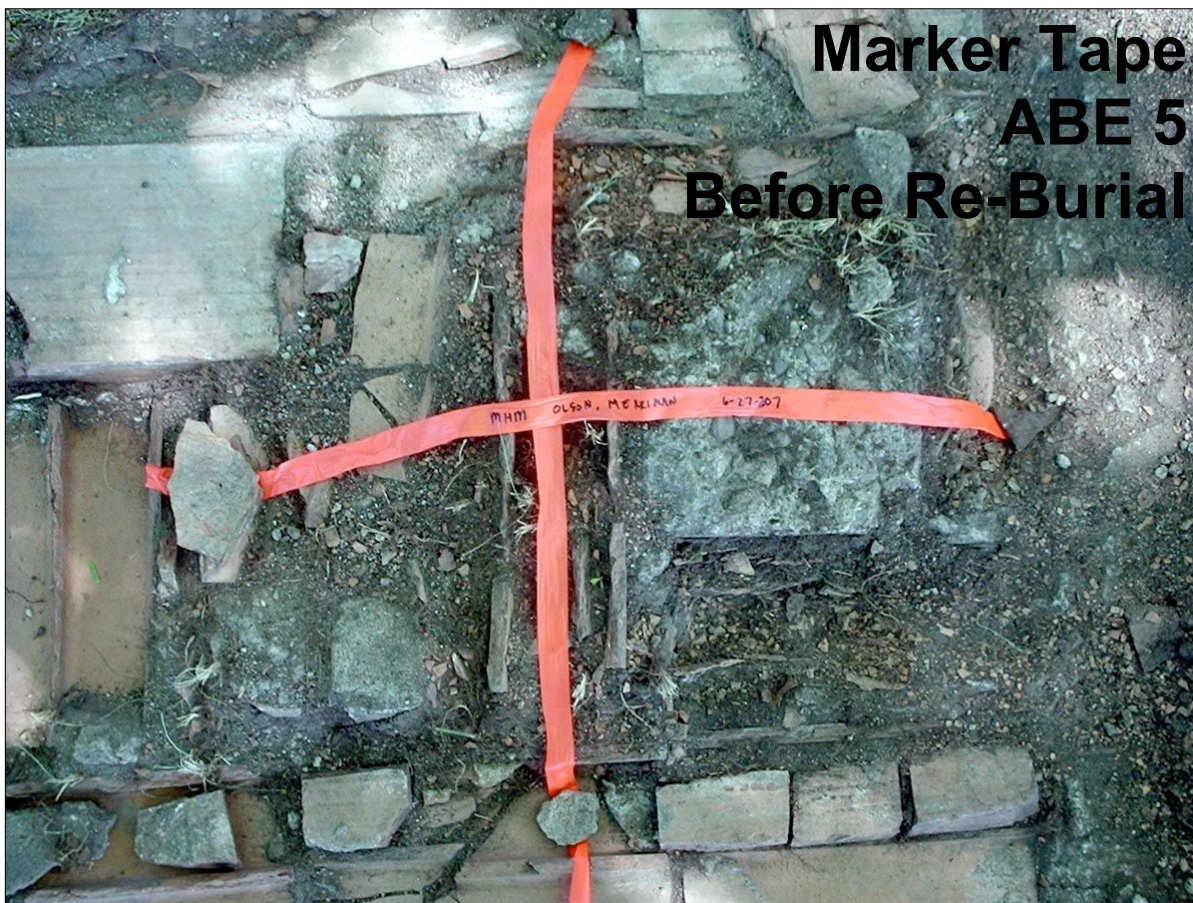
ABE 2



ABE 3







Conclusion

The brief terrestrial and underwater archaeological survey and test excavations conducted by MHM in 2003 and 2007 on Big Island represent the preliminary basis of a Cultural Resources Management assessment. The potential for the location and investigation of archaeological sites on Big Island will only be fulfilled with further historical and field research, a needed exercise to ensure that the cultural heritage of this Lake Minnetonka resource is preserved for future generations and understood by our own. With this goal in mind, MHM staff has several suggestions to locate, document, and preserve the cultural resources of Big Island in keeping with accepted ethical standards and practices within the discipline of archaeology.

Culture Resource Management Recommendations:

1. Enlist the assistance of Hennepin County to place a GPS marker, with known Bench Mark elevation for the placement of a permanent “brass cap,” on Big Island at a site pre-determined by MHM to permit accurate GPS and above sea level readings of features to allow exact mapping
 - An elevation of 941.01 was established near the boat landing by a surveying company in the late 1980s using a spike placed in a 20 foot tall maple tree; obviously this Bench Mark is no longer visible and would be useless planted in a growing tree

2. Complete the Phase 1 terrestrial and underwater survey using MHM’s transit and stadia rod to facilitate the placement of all archaeological features in three dimensions through triangulation. Locate all existing BIAP and BIVC foundations:
 - Steamboat Pier
 - Music Casino
 - Pergola
 - Penny Arcade
 - Moving Pictures House
 - Old Mill Ride Loading Area
 - Water Tower
 - Men’s Dormitory
 - West Picnic Kitchen
 - Define Dance Pavilion Perimeter
 - Amphitheater – prove/disprove its existence
 - BIVC Cabins

3. Complete the Phase 2 mapping of all terrestrial and underwater archaeological sites and features
4. Phase 3 excavations of targeted sites to be determined after the completion of Phase 1 and 2
 - However, MHM has determined that excavation of Big Island Bay is already warranted and the Women's Dormitory foundations, with its large size and differentiated rooms presents a highly suitable excavation area
5. Cataloging - An online database will be created to document Big Island's:
 - Sites
 - Artifacts
6. Conservation
 - Stabilization of archaeological features and artifacts
 - Proper treatment of small finds – ceramics, wood, glass, metal
 - Proper artifact storage in controlled conditions
7. Historic Preservation
 - Stabilize BIVC buildings that are chosen to remain standing; possible state and federal funding for preservation because of link to United States Veterans; this association assists with acquiring Federal and State grants for archaeological and historic preservation
 - Possible nomination to the National Register of Historic Places
8. Creation of an Archaeological Park with movable informational kiosks that can be stored at night or during winter because of vandalism concerns. The Park will probably feature:
 - Snorkeling Opportunities
 - Boat Landing
 - Arch Bases/Pergola
 - Water Tower Foundations
 - Old Mill Ride
 - Roller Coaster Foundations
 - Dance Pavilion Foundations
 - Women's Dormitory
 - Any existing BIVC buildings
 - BIVC Foundations
 - BIVC Middens
9. Publication and Public Education
 - Site Report for Minnesota State Archaeologist
 - Site Report for the Minnesota State Historic Preservation Office
 - Site Report and continual updates for Maritime Heritage Minnesota web site

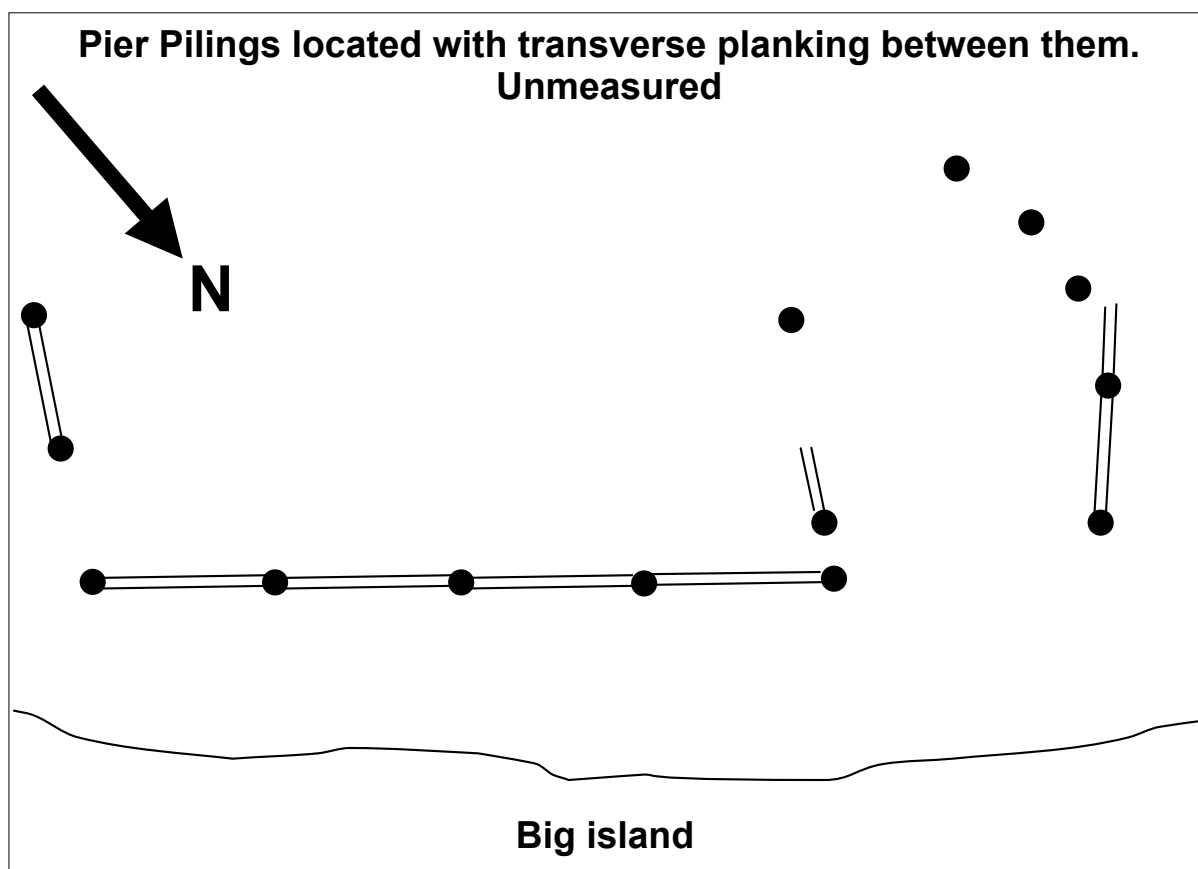
- Publication of book detailing the terrestrial and underwater archaeology of Big Island and its placement in a historical perspective
- Presentation of archaeological papers at the annual Society for Historical Archaeology and Underwater Proceedings conference and American Institute of Archaeology conference
- Traveling exhibit of graphics and artifacts for events such as Archaeology Week at Fort Snelling, special talks and lectures for Twin Cities and surrounding area school districts
- Community Education through class and field work for adults and children
- Partner with Museum of Lake Minnetonka and steamboat Minnehaha for public education tours
- Associate Big Island with the proposed Underwater Archaeological Park on the location of sunken streetcar boats *Hopkins*, *Como*, *White Bear*, Tug *Hercules*, and possible Sidewheeler *Excelsior*; the area is visible from North end of Big Island (where *Minnehaha* used to lie) and an on-shore (movable) interpretive exhibit can link the two parks



Women's Dormitory Foundations



Drainage Feature





The top photograph shows a rare view of the longitudinal planks attached to pier pilings creating the Big Island Amusement Park earth-filled docks. Part of this construction has been located by MHM in Big Island Bay.

The bottom photograph corroborates MHM's preliminary underwater findings that indicate the shape of the pier. Much of the pier's pilings and longitudinal planking may still be intact above the lake's bottom. This large underwater archaeological feature poses no navigational hazard to watercraft, with thousands of boats passing over them for nearly 100 years. It is, however, a unique piece of Minnesota's maritime history that deserves further and complete documentation.

Photographs courtesy of the Minnesota Historical Society.



Conclusions

The abundance of archaeological sites, features, and artifacts discovered during the preliminary fieldwork in 2003 and 2007 indicates that Big Island presents opportunities for years of research and education for adults and children alike. The unique potential for learning through the Big Island Amusement Park and Big Island Veteran's Camp remains requires attention through exploration, documentation, and possible excavation to preserve the Island's cultural heritage. Furthermore, the investigation of all archaeological remains on the Island will not interfere with the Minnehaha Creek Watershed District's ecological conservation program as set forth in its "Final Feasibility Study for: Big Island Wetland Restoration." Maritime Heritage Minnesota has the knowledge and expertise to conduct these investigations, fulfilling its mission as a non-profit organization for scientific and educational activities in the State of Minnesota for the documentation, preservation, and conservation of our finite maritime archaeological and cultural resources, consequently making archaeology understandable and accessible to all.